

Tuesday August 31, 2010

Agenda

- Correct "100 Million Flying Saucers"
- "Communicating Through The Ages" packet

What you missed if you were absent yesterday...

- Timed Multiplication Page
- Reading Page



Homework Log

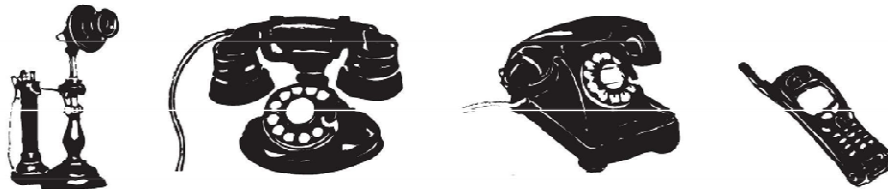
- No additional assignment



Homework Log

- No additional assignment

Communicating Through the Ages



Think about all the things you have done today that have involved information exchange. Did you read a book or watch TV? Did you e-mail or call a friend? Our communication options have changed a lot over the years. Read the timeline to learn how people have shared information through time, from the invention of the printing press to the Internet.

1449 Johann Gutenberg invents a printing press that uses movable type. He places metal letters on a tray to form words. He then uses a wine press and ink to print the words on paper. He repeats the steps to make new copies. Before the printing press, monks took years to copy books by hand with quill pens. Gutenberg's machine gives even common people access to books and learning.

1564 A soft black mineral—good for writing and drawing—is found in England. People hold chunks of it in their hands to write. Then they begin to wind it in string or cover it with leather to keep their hands clean. Finally, the graphite is placed in a hole drilled into a stick of wood. The pencil is born. It provides people with an erasable writing tool.

1837 Samuel Morse, a painter turned inventor, learns that pulses of electric current can be sent over a wire. He writes a code of dots and dashes. The telegraph allows people to send messages over long distances.

1868 Latham Sholes patents a machine with letters on keys. Many before him have tried to build a writing machine. Sholes' typewriter is the first to type faster than a person can write. Improvements later lead to the electric typewriter and eventually the computer word processor.

1876 Alexander Graham Bell patents the telephone. Bell has been studying sound since childhood. He is interested in the work others do with sound. One time he misinterprets a German book. The writer talks about sounds that can be made with a piece of metal. Bell translates the reading to mean sound can be transmitted over wire. Trying to achieve this, Bell invents the telephone.

1877 Thomas Edison invents the phonograph. He mounts tinfoil on a grooved cylinder. He attaches a needle and a little metal cup to the cylinder. Edison says "Mary had a little lamb" into a mouthpiece attached to the metal cup. Vibrations from his voice reach the cup and move the needle. The needle etches the foil. The phonograph records Edison's words. At first, people think it is a hoax. Soon, the invention makes Edison famous.

1895 Guglielmo Marconi makes a device that uses an antenna to send messages over several kilometers without the use of wires. Fourteen years later, a live opera is broadcast on radio. By the 1920s, many fans listen to weekly shows on home radios.

1898 Building on Edison's phonograph idea, Valdemar Poulsen patents the first tape recorder. By the 1940s, it is used by record companies. Ten years later, it makes its way into homes.

The first commercial motion picture is shown in the U.S. The motion picture camera evolved from many nineteenth century inventions concerning light and motion.

1924 John Baird uses an empty biscuit box, knitting needles, an old motor, and the lens from a bicycle light to make a picture on a screen. Working in his attic, he transmits the shadowy image of a neighborhood boy from his transmitter in one room to his screen in another. Baird has made an early version of the television set.

1957 The first artificial satellite is launched into space. More follow. Soon, TV stations bounce signals off satellites to satellite dishes at homes.

1969 Students and staff from two major colleges in the U.S. connect computers for the Defense Department. The Internet develops out of this networking idea.

1971 Ted E. Hoff invents the microchip. Working in a garage a few years later, Steven Jobs and Stephen Wozniak use the tiny processing chip in the first home computers.

1979 The first cellular phone system is established in Tokyo. Large towers transmit radio signals, so the phones need no wires.

1980 Fax machines and scanners become available. A century earlier, Alexander Bain in Scotland sent the first drawing over telephone lines.

1983 Compact disc (or CD) digital recording is introduced. Today, almost all music is produced on CDs.

1989 Tim Berners-Lee creates the World Wide Web, which enables computer users to access a wide variety of information. People who live far apart suddenly seem a part of the same community. News from around the world becomes available instantly. People study, shop, conduct business, and talk to friends without leaving their homes.

Name _____

Questions About Communicating Through the Ages



Answer the following questions in complete sentences.

1. Many printing presses were in use before Gutenberg's machine. What made his press special?

2. What material is found inside a pencil?

3. What machine did Latham Sholes patent?

4. What was unusual about how Bell happened to invent the telephone?

5. Who invented the phonograph?

6. Where was the first home computer built?

7. How has Tim Berners-Lee's invention affected you?

8. How can the expression "It's a small world" be applied to advances in communication?

Name _____

Vocabulary



Complete the sentences below by filling in each blank with one of the words from the Word Box.

Word Box				
communicate	Internet	graphite	electric current	antenna
telegraph	transmitted	phonograph	radio waves	

1. Although many people think it is lead, it is really _____ that you find inside a pencil.
2. We _____ with one another when we exchange information.
3. Samuel Morse learned that _____ could be sent over a wire.
4. A _____ is also sometimes called a record player.
5. Cellular phones need no wires because towers transmit _____ over a long distance without wires.
6. The _____ is a system that connects computers to one another.
7. Coded messages are sent over long distances with the use of the _____.
8. An _____ sends and receives radio waves.
9. A message that has been sent from one place to another has been _____.

Name _____

Toys Timeline



Countless innovations have changed the way we communicate. New ideas have also changed the way we play. Complete the timeline of toys at the bottom of the page by writing the name of the invention that corresponds with each date.

Invention	Inventor	Date
Balloon	Michael Faraday	1824
Barbie doll	Ruth Handler	1959
First bicycle with pedals	Kirkpatrick Macmillan	1839
Comic strip	Richard Felton Outcault	1895
Crayola crayons	Edwin Binney and Harold Smith	1903
Frisbee	Walter Morrison	1947
Game Boy	Gunpei Yokoi	1989
Jigsaw puzzle	John Spilsbury	1767
Modern roller skates	J. L. Plimpton	1863
Duncan Yo-yo	Donald Duncan	1920

